

RODUCT TESTING SI

100 Clemson Research Blvd. Anderson, SC 29625 Tel (864) 646-TILE

TCNA TEST REPORT NUMBER: TCNA-051-08

TEST REQUESTED BY:

Noble Company Attn: Jim Wadaga P.O. Box 350

Grand Haven, MI 49417

TEST SUBJECT MATERIAL:

Identified by client as: NobleSeal CIS

TEST DATES:

4/2/08-4/4/08

ANSI SPECIFICATION FOR CRACK ISOLATION MEMBRANES FOR THIN-SET CERAMIC TILE AND **DIMENSION STONE INSTALLATION (A118.12)**

System Crack Resistance Test (5.4)

Specimen 1: 0.016-inches No Cracking to grout or tile 0.032-inches No Cracking to grout or tile

0.048-inches No Cracking to grout or tile 0.064-inches No Cracking to grout or tile 0.080-inches No Cracking to grout or tile 0.096-inches No Cracking to grout or tile 0.112-inches No Cracking to grout or tile 0.128-inches No Cracking to grout or tile

Specimen 2: 0.016-inches No Cracking to grout or tile

0.032-inches No Cracking to grout or tile 0.048-inches No Cracking to grout or tile 0.064-inches No Cracking to grout or tile 0.080-inches No Cracking to grout or tile 0.096-inches No Cracking to grout or tile 0.112-inches No Cracking to grout or tile 0.128-inches No Cracking to grout or tile

Specimen 3: 0.016-inches No Cracking to grout or tile

0.032-inches No Cracking to grout or tile 0.048-inches No Cracking to grout or tile 0.064-inches No Cracking to grout or tile 0.080-inches No Cracking to grout or tile 0.096-inches No Cracking to grout or tile 0.112-inches No Cracking to grout or tile 0.128-inches No Cracking to grout or tile

NOTE: Two 10 x 8 x 2-inch concrete blocks were butted together to form a 20 x 8 x 2-inch unit. The NobleSeal CIS was applied to the concrete blocks using NobleBond EXT, per manufacturer's instructions. A specific pattern of 4 x 8 x ½-inch quarry tiles (detailed by the method) was bonded to the NobleSeal CIS using Mapei Kerabond and Keralastic. The system was grouted using Mapei Keracolor S sanded grout. The blocks were cured for an additional 28 days.

In accordance with ANSI A118.12 system crack resistance test, this material is classified as "high performance".

[The ANSI A118.12 Requirement for system crack resistance states: "standard performance: tile failure occurs after 1/16" specimen gap opening, but before 1/8" gap opening. High performance: The failure does not occur by 1/8" specimen gap opening."]

Katelyn Simpson

Laboratory Engineer

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